

REMARKS:

This paper is herewith filed in response to the Examiner's Office Action mailed on February 3, 2010 for the above-captioned U.S. Patent Application. This office action is a rejection of claims 1-3, 6-7, 10-12, and 15-23 of the application.

More specifically, the Examiner has rejected claims 1-3, 6-7, 10-12, 16-17, 19, 20, and 22-23 under 35 USC 103(a) as being unpatentable over Venolia (US6573844) in view of Comerford (US5963671) in further view of Shimada (US7136047). The Applicant respectfully traverses the rejection.

Claims 1, 3, 6, 11, 16-17, 19-20, and 22-23 have been amended. Support for the amendments can be found at least on page 5, lines 21-31; page 6, lines 20-27; page 7, lines 1-8; and Figures 3a and 3b of the Application as filed. No new matter is added.

First, although the Applicant does not expressly or impliedly agree with the rejections, the Applicant submits that in order to facilitate the prosecution of this patent application towards allowance each of the independent claims 1, 6, and 11 have been amended in a somewhat similar fashion. For example, claim 1 now recites that:

A method comprising: receiving a separate information unit entered with an input element of a dynamic input/output arrangement belonging to a user interface of an electronic device; automatically determining from an identity of the separate information unit whether an input entry is for performing a first function by the device or for performing a second function by the device, wherein when it is determined that the input entry is for performing the first function by the device, increasing in an equal amount a size of input elements of which at least one is a subsequent input element needed for performing the first function by the device and decreasing in size, from their original size, any input elements not needed for performing the first function by the device; and when it is determined that the input entry is for performing the second function by the device, determining which particular information unit should be input next for performing the second function; and emphasizing by size the input element corresponding to the particular information unit which should be entered next in the user interface of the electronic device, wherein the sizes of the emphasized input elements vary on a case-specific basis

depending on respective probabilities of the information units associated with the input elements.

The Applicant note that an exemplary embodiment of the invention relates to determining, by an electronic device, which particular function of a plurality of functions (for example a wireless communication function or a training function) is to be performed by the device based on an initial input entry by a user of the device. Then, in accordance with the exemplary embodiments, the device selectively emphasizes or de-emphasizes (for example increasing or decreasing a size, respectively, of an original size) one or more input elements (for example soft keys displayed on the device) based on whether at least one of the input elements is a needed as a subsequent input entry, by the user, for the device to perform the particular function. Further, in accordance with the exemplary embodiments, at the same time as the emphasizing and de-emphasizing the descriptive text of at least one of the input elements can be advantageously changed to relate to the particular function to be performed by the device. The Applicant submits that support for the amendments can be found at least on page 5, lines 21-31; page 6, lines 20-27; page 7, lines 1-8; and Figures 3a and 3b of the Application as filed.

The Applicant respectfully submits that claim 1 is patently distinguishable from the references cited for at least the reasons below:

The references cited do not disclose or suggest determining from an identity of the separate information unit whether an input entry is for performing a first function by a device or for performing a second function by a device

With regards to Venolia, the Applicant notes that in the rejection the Examiner cites where it is indicated that the embodiments of Venolia relate to an attempt to overcome the difficulty of typing on a soft keyboard, such as one that is used with a PDA, by predicting keys of the soft keyboard which are likely to be entered next and displaying those keys differently on the keyboard. According to Venolia, these keys, which are displayed differently, are easier to type (see col. 6, lines 23-47). Further, the Applicant submits that in Venolia, order to predict which keys are likely to be entered next Venolia

relies on statistical word models and dictionary data (see col. 7, line 35 to col. 6, line 54). Thus, the Applicant contends that in Venolia there is no determination of whether an input entry is for performing a first function by a device or for performing a second function by a device. Rather, the operations of Venolia are seen to be concerned with the difficulty of typing on a soft keyboard and the statistically probable next character as it relates to a word, such as one found in a dictionary.

Comerford relates to a method where “The most likely to be used characters and controls of the soft keyboard are determined from consulting trigram tables, and their presentation graphically enhanced and/or positioned to attract the user and to facilitate quick recognition and selection,” (col. 2, lines 2-6). The Applicant submits that there can not be found in Comerford where it is disclosed or suggested determining from an identity of the separate information unit whether an input entry is for performing a first function by a device or for performing a second function by a device, as in claim 1.

Regarding the reference Shimada, the Applicant notes that in the rejection the Examiner asserts:

“Shimada teaches wherein the separate information unit corresponds to a first character entered in a composition activity (column 2 lines 56-60, Fig 7 - the groups correspond to the character set which is displayed for user selection for typing in a word processing document). Shimada which facilitates quicker selection of input units teaches automatically determining from the identity of the separate information unit whether input is in a first mode or a second mode (column 2 lines 56-60 - taught as a user selecting an appropriate mode for which the user wants the input units to be displayed, those modes can consist of numbers and the English alphabet);” and

“wherein when it is determined that the input entry is in a first mode, increasing in an equal amount size of members of a group of input elements (column 2 lines 56-64, Figures 4C and 4D). Therefore Shimada provides for a user to select a mode and display only characters corresponding to that mode on the display in a larger fashion that they would typically need to be if each character were to be constantly displayed on the screen for selection,” (see pages 4-5 of the Office Action).

Shimada, as cited, actually discloses:

“To select a particular character, a user simply pushes the appropriate group symbol in the input area, at which point the relevant group of characters is displayed in the candidate area. Subsequently, the user directly selects the desired character in the candidate area,” and

“It will be appreciated that the present invention allows the buttons used to input characters to be much larger than they would typically need to be if each character were to be constantly displayed on the screen for selection,” (col. 2, lines 56-64).

First, the Applicant submits that pushing the appropriate group symbol in order to display a relevant group of characters in the candidate area of Shimada does not disclose or suggest determining from an identity of the separate information unit whether an input entry is for performing a first function by a device or for performing a second function by the device, as in claim 1. Rather, the Applicant submits that the device in Shimada merely responds to a particular group symbol which was pushed by the user and displays the character set for that particular group symbol. In Shimada there is no determining whether an input entry is for either one of performing a first function or second function by the device in Shimada. Instead, the particular group symbol only has one corresponding operation which is to display the character set associated with the group symbol that was pressed. Further, the Applicant submits that this interpretation is seen to be supported where the Examiner asserts in the rejection that “the groups correspond to the character set which is displayed for user selection for typing in a word processing document,” as stated above (emphasis added).

The references cited do not disclose or suggest when it is determined that the input entry is for performing the first function by the device, increasing in an equal amount a size of input elements of which at least one is a subsequent input element needed for performing the first function by the device and decreasing in size, from their original size, any input elements not needed for performing the first function by the device

The Applicant notes that Venolia discloses:

Referring now to FIG. 5, in 500 a running total variable is initially reset to zero. In 502, the probability that each key is likely to be entered next by a user is determined. For example, the probabilities may be determined as has been described in the preceding section of the detailed description, based on already entered keys as displayed within a sequence of keys on the display area of a device. Thus, a statistical character model or a statistical word model may be used to determine the probabilities in 502," (col. 9, lines 9-17).

Here, Venolia discloses that the probabilities of which key may be entered next is merely based on a sequence of keys and that a statistical character model or a statistical word model may be used to determine the probabilities.

However, the Applicant submits that Venolia does not relate to any operation of determining whether an input entry is for performing a first function by a device or for performing a second function by a device, as stated above, and when it is determined that the input entry is for performing the first function by the device, increasing in an equal amount a size of input elements of which at least one is a subsequent input element needed for performing the first function by the device and decreasing in size, from their original size, any input elements not needed for performing the first function by the device. Rather, the Applicant submits that Venolia is merely concerned with predicting a next character for a word entered on a device such as a PDA, and Venolia is not concerned about whether an input entry is for performing a particular function by the PDA.

With regards to Comerford, the Applicant submits that according to Comerford, as stated above, the most likely to be used characters and controls of the soft keyboard are determined from consulting trigram tables. Thus, the Applicant contends that Comerford does not disclose or suggest the above identified elements of claim 1.

The Applicant notes that, as stated above, in the rejection of claim 1 the Examiner asserts that “Shimada provides for a user to select a mode and display only characters corresponding to that mode on the display in a larger fashion that they would typically need to be if each character were to be constantly displayed on the screen for selection.” The Applicant submits that Shimada discloses a numerical mode where “it is typically not required that any candidates be displayed after pushing an input key, since each input key will typically only be associated with one number,” (emphasis added), (col. 8, lines 51-54) and “character entry mode (i.e. an input area is displayed and a candidate area may or may not yet be displayed and if displayed may or may not yet have entries within it),” (emphasis added), (col. 9, lines 6-9). Thus, according to Shimada this numerical mode and character entry mode does not appear to always result in a display of characters in the candidate area, as applied in the rejection, and certainly do not result in the display of characters identified as needed for performing a particular function previously determined, based on an input, to be performed by a device in Shimada.

The Applicant submits that, clearly, the operations of Shimada do not disclose or suggest at least where claim 1 relates to when it is determined that the input entry is for performing the first function by the device, increasing in an equal amount a size of input elements of which at least one is a subsequent input element needed for performing the first function by the device and decreasing in size, from their original size, any input elements not needed for performing the first function by the device.

The references cited do not disclose or suggest when it is determined that the input entry is for performing the second function by the device, determining which particular information unit should be input next for performing the second function; and emphasizing by size the input element corresponding to the particular information unit which should be entered next in the user interface of the electronic device

The Applicant submits that for at least the reasons already stated the references cited to do not disclose or suggest at least where claim 1 relates to determining which particular

information unit should be input next for performing the second function; and emphasizing by size the input element corresponding to the particular information unit which should be entered next in the user interface of the electronic device. The Applicant contends that this is the case for at least the reason, as similarly stated above, that neither Venolia, Comerford, nor Shimada disclose or suggest any determining whether an input entry is for performing a first function by a device or for performing a second function by a device. Thus, none of Venolia, Comerford, and Shimada discloses or suggests determining which particular information unit should be input next for performing the second function.

Further, with regards to the Response to Arguments section of the Office Action, although the Applicant does not agree with the Examiner, the Applicant notes that claim 1 has been amended to similarly recite that the decreasing in size of input elements is from their original size.

In addition, the Applicant submits that, for at least the reasons stated, even if the references were somehow combined, which is not agreed to as proper, the proposed combination would still not disclose or suggest claim 1.

The Applicant submits that, for at least the reasons stated above, the references cited do not disclose or suggest claim 1. Therefore, the Applicant respectfully requests that the rejection of claim 1 be removed and claim 1 be allowed.

In addition, the Applicant submits that, for similar reasons, the foregoing amendments to the independent claims 6 and 11 also place these claims in condition for allowance in view of the references cited. Therefore the Examiner is requested to remove the rejections and allow these claims.

Further, the Applicant submits that, for at least the reasons stated above, the references cited do not disclose or suggest at least where claims 16, 19, and 22 similarly relate to based upon a particular function of the device to be performed, changing a descriptive

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text of at least one of the input elements to descriptive text associated with the particular function. The Applicant requests that the Examiner remove the rejections and allow these claims.

Additionally, the Applicant submits that, for at least the reasons already stated, the references cited do not disclose or suggest at least where claims 17, 20, and 23 similarly relate to wherein the first function is a wireless communication performed by the device and where the second function is a teaching function performed by the device for a user of the device. Therefore, Applicant requests that the Examiner remove the rejections and allow these claims.

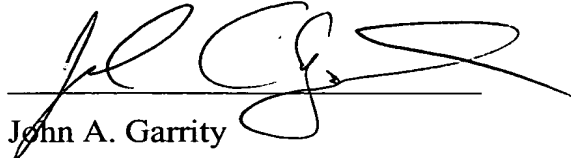
Furthermore, for at least the reason that claims 2-3 and 16-17; claims 7, 10, and 19-20; and claims 12 and 22-23 depend from claims 1, 6, and 11, respectively, the references cited can not be seen to disclose or suggest these claims and the rejections of these claims should be removed.

Based on the above explanations and arguments, it is clear that the references cited cannot be seen to disclose or suggest claims 1-3, 6-7, 10-12, 16-17, 19-20, and 22-23. The Examiner is respectfully requested to reconsider and remove the rejections of claims 1-3, 6-7, 10-12, 16-17, 19-20, and 22-23, and to allow all of the pending claims 1-3, 6-7, 10-12, 16-17, 19-20, and 22-23 as now presented for examination.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record. Should any unresolved issue remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Respectfully submitted:

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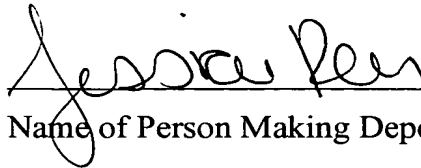
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